

Region 5 - South Central Montana

Bighorn River

Water became a bigger issue than ever on the Bighorn River this year. Flows have always been identified as the single greatest factor controlling trout numbers in the river, but the issue came to a head this year when a local group in Wyoming decided that, despite ongoing drought conditions, the Bureau of Reclamation (BOR) should start managing Bighorn Lake for launching at the silted-in boat ramp at the southern end of the reservoir. This issue became very political and consumed lots of time preparing for and attending numerous meetings. The result was the most conservative management of the Bighorn River observed to date. River flows were reduced to the absolute minimum flow of 1,500 cfs in July of 2006 and remained at this low level until mid-June of 2007, when flows were increased to 1,750 cfs. They were maintained at 1,750 cfs until early November, when they were increased to 1,900 cfs for the winter to enhance brown trout spawning and egg incubation.

Trout populations on the Bighorn River had rebounded from the record low levels of 2003, thanks to good flow conditions in 2005. Many of the strong 2004 and 2005 year classes of brown and rainbow trout that were carried through by the good flows in 2005 were still available to anglers this past year. Angling success was good throughout the 2007 season. Catch rates were up due to the higher trout numbers, but the average size and condition of the trout was down from those observed in 2004 and 2005, when total trout numbers were at their lowest.

Population estimates conducted on the Bighorn River in 2007 indicated the low flows of 2006 and 2007 were again impacting trout numbers. Spring sampling on the upper river showed total trout numbers similar to 2006 levels, but most fish were 2- or 3-year-old trout carried over from 2005. Numbers of yearling browns were down, and very few yearling rainbows were captured. Fall sampling on the lower river near the Mallards Landing Fishing Access Site (FAS) showed significant declines in all trout from 2006 levels. Yearling fish dominated trout populations in the lower section, but young-of-year (YOY) trout were almost nonexistent. Only about 8 YOY brown and no YOY rainbow trout were handled in 5 days of electrofishing on the lower river, which was the worst YOY catch-rate ever recorded on the lower river in the fall. Up to this point in the ongoing drought, recruitment has been the problem, with good numbers of YOY trout showing up in the fall, but few of them recruiting into the population, likely due to predation from larger trout. This year was the first time the YOY trout were missing from the fall sample, indicating a very weak 2006 year-class. If spawning success and recruitment are affected by low flows, trout numbers in the Bighorn River could drop rapidly from the already low, drought-induced numbers seen this past season.

Whirling disease has not been found in the Bighorn River so far, but the missing YOY this fall indicated it was time to retest for its presence. Test cages of live trout were recently placed in the river. Fish from these cages are now being raised in a lab until large enough to be tested for exposure to whirling disease. Results should be available some time this spring.

Boulder River

Despite ongoing drought conditions, fish population estimates in the B2 section of the Boulder River near McLeod suggest that the rainbow and brown trout populations are in good shape and around their long-term average. An electrofishing run was also performed in the Allers Section of the river located upstream of the Natural Bridge Falls. Although the population estimate has not been completed, fish numbers appeared to be similar to past estimates. One notable exception was the abundance of brook trout in the section. Brook trout have been present in the sampling section since monitoring began, but their capture was incidental and quite rare. This time, brook trout represented approximately one-third of the catch, and reports from anglers confirm

their abundance. This increase is of concern because this reach of river is managed for rainbow trout.



Silver Lake, where Yellowstone cutthroat trout restoration is occurring.

The Yellowstone cutthroat (YCT) restoration project initiated in 2006 in Four Mile Creek, a tributary to the upper Boulder River, is continuing ahead of pace. Eventually our goal is to replace the entire fishery in Four Mile Creek with cutthroats to protect Meatrack Creek, a tributary to Four Mile Creek that harbors an excellent population of YCT. Until recently, rainbow trout were not found in Meatrack Creek, but in the last 2-3 years they have begun to appear in the population and hybridize with the

cutthroats. To protect YCT in Meatrack Creek, we began to remove the rainbows from Silver and Prospect lakes located at the head of Four Mile Creek. Gill nets were fished in the lakes all last year including during the winter under the ice. Over 700 fish were removed from each lake. In 2007, fewer than 50 fish were captured, and most of them were very small. Netting will continue through 2008 to attempt to completely eliminate the population. The lakes will be restocked in 2007 with 2-inch YCT, which will be too small to be captured in the gill nets. The lakes will be stocked for at least 3 years, and then monitored.

Stillwater River

The Derby Fire was the largest wildfire in Montana during 2006 and one of the largest in the nation. It burned much of the middle section of the Stillwater River from Cliff Swallow FAS to Moraine FAS, including several tributary streams. Despite the seemingly desolate surrounding landscape, there has been little change in the fishery or the habitat in the creek. Large fires are known to increase sedimentation and nutrient loading into rivers and streams. While these impacts have been more substantial in some of the tributaries (like Bad Canyon and Trout creeks), there has been little impact on the fishery in the main river. Most of the major spawning areas are located upstream of the burned area. In Bad Canyon Creek, we have noticed more substantial impacts. In the upper watershed, where the burn was much more intense, large amounts of sediment have entered the stream, and fish densities are very low. Other areas lower in

the watershed not burned as severely are in good shape. Adult fish are still abundant; however, YOY numbers were substantially lower than in previous samples. This reduction could be related to the higher sediment loads in spring when cutthroat eggs are in the gravel and are susceptible to being smothered by fine sediment. Fire is a phenomenon that these systems evolved with. In the long run, fire will likely benefit the fishery by increasing pools formed by large trees falling in the creek and by bringing new spawning gravels into the system.

Goose Lake, located at the headwaters of the Stillwater River north of Cooke City, has become our source for YCT. Fertilized eggs have been collected from fish in the lake and transported to the Yellowstone River Trout Hatchery in Big Timber over the past 4 years. Because of the success of these egg takes, the brood stock in the hatchery is being switched from the McBride Lake strain that originated in Yellowstone National Park to the Goose Lake strain. Goose Creek, which flows out of Goose Lake and enters the Stillwater River, is populated by brook trout in the lower and middle reaches. A small boulder cascade prevents brook trout from migrating upstream and colonizing Goose Lake. A project was undertaken in 2007 to protect the Goose Lake fishery from brook trout and to expand the range of the YCT in the drainage. Brook trout were chemically removed from 6 miles of Goose Creek to its confluence with the Stillwater River, along with three lakes. Waterfalls in the lower creek near its confluence prevent any upstream fish migration. The stream and lakes will likely be treated a second time during the summer of 2008, and the waters will be stocked with YCT in either late 2008 or 2009.

Clarks Fork of The Yellowstone River

We electrofished Rock Creek in the vicinity of Joliet in the spring of 2007. Habitat conditions in this reach have changed dramatically through the years. A 100-year flood event occurred in the Rock Creek drainage in the spring of 2005, when an estimated 2,500 cfs of water flowed over the spillway of Cooney Dam. This flood contributed to the further scouring of much of the streambed and scoured to bedrock in the Joliet section of the creek. Despite these habitat changes, a small but robust population of brown trout persists in the creek. This section, unlike many others in the lower reaches of Rock Creek, maintains adequate flows during most of the summer as a result of irrigation releases from Cooney Reservoir. Good flows, warmer water, and a lower density of fish have resulted in larger brown trout than in any other reach sampled. It is not uncommon to encounter brown trout over 18 inches long. There are also a few rainbows and an abundant population of mountain whitefish.

Middle Yellowstone River

A population estimate was performed in the Yellowstone River near Big Timber. Rainbow trout were once again very abundant in the section. Also, for the first time in several years, the numbers of juvenile brown trout (i.e., those less than 8 inches long) increased considerably. This increase is good news, as past samples have contained many adult fish and very few juveniles. As part of our population sampling, we have also been tagging all trout and ling over 12 inches long; to date we have tagged more than 2,235 fish. From these data we have been able to determine the growth rate of fish in this section of the river. Particularly good data for rainbow trout suggest that those 14 to 16 inches long grew approximately 2 inches each year. Although not very

many fish in the 18-inch size group were recaptured in 2007, very few had grown over the past year.

YCT restoration continued in 2007 in Soda Butte Creek near Cooke City. The 2004 chemical removal of brook trout from the headwaters appears to have been successful. Because of the healthy population of cutthroat trout in the lower creek, electrofishing is being used to selectively remove the brook trout and release the YCT back to the creek. Removal has progressed as follows: 2005, 667 removed; 2006, 225; 2007, 150. Most of the fish removed in 2007 (all but 48) were caught in or near Yellowstone National Park. This result is discouraging because it means the population is expanding farther downstream. If population expansion continues, it is possible that new waters such as Pebble and Amphitheater creeks could be colonized by brook trout. We will continue to work with our partners, the Gallatin National Forest and Yellowstone National Park, to remove brook trout from Soda Butte Creek to protect the YCT population from potential displacement.

Lower and Upper Deer creeks were also severely burned during the 2006 Derby Wildfire. Both creeks harbor native populations of YCT. Because the aftermath of the fire could produce conditions that could wipe out the fishery, YCT from both creeks were transported to an unburned creek near Red Lodge. Post-fire monitoring in 2007 suggested that all incubating eggs of cutthroat and brown trout were killed by the large amounts of ash and sediment that entered the creek during spring rains. Levels were not, however, toxic enough to cause significant mortality of older fish. Higher in the drainage, cutthroat and brown trout reproduction was successful, albeit substantially less than in previous years. Throughout the creek, large deltas of sediment have washed across the valley floor and into the creek from the steep hillsides above. Fortunately, during 2007, most of the rains were gentle and came later in June when new plants had begun to grow. Although conditions in the creek are improving, there still is the potential for significant debris flows if a heavy precipitation event occurs. Therefore, preventative measures will continue to ensure that the unique fishery in these creeks is not lost.

Lower Yellowstone River

Smallmouth bass continue to flourish in the Yellowstone River. This abundance may be the result of lower, more consistent flows associated with the ongoing drought. Large numbers of bass were sampled throughout the Region 5 portion of the Yellowstone during 2007. Some bass weighed nearly 3 lb, with many in the 1 to 2 lb range. Bass numbers have increased above Huntley diversion dam with some caught as far upstream as Laurel. Anglers have reported catching bass throughout the ice-free months, with peak fishing success during the hotter months of the summer.

Catfish and sauger fishing appeared good on the Yellowstone River in 2007. Shoreline anglers in the Huntley area reported catching sauger ranging from 1 to 5 lb. Typically, the least fishing success occurred during the fall months, when flows were low and the water was clearer. Anglers reported catching catfish throughout the year, with peak success during the summer months. MontanaCats.com held the first ever Yellowstone River catfish tournament in May of 2007 between Billings and the confluence with the Bighorn River. FWP crews provided holding tanks with aeration to alleviate mortality, as

it was a catch-and-release event. All of the 73 fish captured by participants were weighed, measured, tagged, and released. The aeration system prevented any mortality during the one-day event.

A native species telemetry project continued in the Region 5 portion of the Yellowstone River during 2007. Crews deployed trap nets, electrofishing equipment, and drift



trammel nets between Park City and the confluence with the Bighorn River to capture burbot, channel catfish and sauger, and implant additional radio transmitters. They also collected spiny soft shell turtles and fitted them with external radios to examine movement patterns. Tracking data collected throughout 2007 yielded interesting movement information useful for management of these large-river species in the future. Plans to extend the telemetry study into the Bighorn River were implemented in the fall of 2007 on the portion of the Bighorn River from Two

Leggins Diversion Dam to the confluence with the Yellowstone River. Ten channel catfish and ten burbot were implanted with radio transmitters in an effort to identify distribution, spawning locations, and habitat use of these species. Plans are to continue these studies for at least two more years. Anglers are asked to report any tagged fish they catch in the Yellowstone and Bighorn rivers, as these data are important to the success of this study. Also, anglers are asked to consider releasing any fish they catch that has a thin wire radio antenna extending from within the body cavity. It can take a lot of effort to get one of these radios out, and we hope to get as much data as possible from each marked fish. The transmitters have up to a four-year battery life.

Additional trapping for identifying spiny soft shell turtle distribution was commenced in August of 2007 from the mouth of the Clarks Fork of the Yellowstone River to the Huntley diversion dam. This work was a portion of the Spiny Soft shell Turtle Survey being conducted throughout central and eastern Montana. Spiny soft shell turtles were found throughout the study area in Region 5, filling in some distribution gaps along the Yellowstone River. Work related to this survey will continue in 2008 between the Huntley diversion dam and confluence with the Bighorn River.

A large-scale cleanup effort took place throughout the entire length of the Yellowstone River in 2007. In cooperation with a variety of other groups and volunteers, Region 5 fisheries crews removed many tons of tires, scrap metal, and various other items in an effort to clear the river of years of accumulated garbage. The cleanup event will occur annually, and FWP hopes to continue to help with the event.

Musselshell River

Local anglers reported good fishing for both smallmouth bass and channel catfish in the Musselshell River from Roundup downstream this summer. Even though drought conditions continued in the Musselshell Drainage, flows downstream from Roundup

have been much better than in the early 2000s. Water commissioners have been hired to manage flows throughout the drainage, and their oversight seems to have generally improved flows in the lower river.

An attempt to estimate brown trout numbers in our standard section upstream of Two Dot was unsuccessful this spring. In one day of shocking, we marked 72 brown trout ranging from 3.7 to 19.1 inches in 1.25 miles of stream. Spring rains made the river too muddy to effectively electrofish again before spring runoff began, so no estimate was completed. Based on the fish captured during the marking run, the brown trout seem to be doing well in the Musselshell despite the drought. It may be a good river for anglers who want to get away from the crowds and still catch some nice trout.

Bighorn Lake

Water-level management on Bighorn Lake in 2007 was the most conservative observed since the dam was closed. Water elevations reached their lowest level at about 34 feet below full pool by late February then started to rise. In the past, even with good snowpack accumulations, the management goal on Bighorn Lake has been to raise water levels to the minimum launch elevation at Horseshoe Bend (3615 feet) by Memorial Day weekend. This year, lake levels were above 3615 feet by May 5th, and they continued to rise through the spring, reaching a peak elevation less than 2 feet from full pool (3640 feet) on June 26th. Minimal releases in the Bighorn River kept water levels in Bighorn Lake within about 10 feet of full pool throughout the summer and fall, with levels less than 8 feet from full at the end of November.

Angler success was mixed on Bighorn Lake in 2007. The smallmouth bass population seems to do well regardless of lake levels, and bass were abundant throughout the lake in 2007. Just about anyone who wanted to spend a nice day on Bighorn Lake could count on catching some smallmouths, with many in the 1 to 2 lb range. Sauger continued to do very well in Bighorn Lake this year. At least two strong year-classes of sauger were produced during low lake levels early in the current drought, and many anglers reported good catches throughout the season. Most of these sauger were 13 to 15 inches long in the spring, with many of them reaching 18 inches by fall. Walleye fishing was spotty throughout the season. Netting results indicated walleyes were doing well in the lake, and some anglers reported nice catches of walleye, but fishing wasn't consistent. Both walleyes and sauger captured in gill nets were in great condition, indicating they had plenty to eat. An abundant food supply may have been one reason they were hard to catch. Anglers also reported catching a few nice yellow perch and crappie in Bighorn Lake this year.

One night of electrofishing near the Ok-A-Beh access in the spring captured 41 walleyes ranging from 9.0 to 31.6 inches long. The largest fish was a gravid female weighing 14.75 lb. Most of the walleye captured were in the 18 to 22 inch size range. Smallmouth bass were by far the most abundant fish captured during spring electrofishing, with 78 fish ranging from 5 to 16.6 inches long.

Standard sets of six gill nets were fished overnight in both the upper and lower ends of Bighorn Lake in the spring and fall. Catch rates were much better than a few years ago when the drought first hit the lake. Walleye catch-rates ranged from 20 walleyes from

the lower lake and 9 from the upper lake in the spring, to 34 in the lower lake and 44 in the upper lake in the fall. A majority of these walleyes were 18 to 22 inches long. These data indicated that nice walleyes were fairly abundant throughout the lake, even if anglers couldn't get them to bite. Netting results again showed that sauger were doing very well in Bighorn Lake. Spring nets in the lower end of the lake caught 14 sauger or 2.3 sauger per net. This catch rate was high for the lower lake, because most sauger normally seem to stay in the upper end. Spring nets in the upper lake around Barry's Landing captured 102 sauger or 17 sauger per net. This catch was the second best ever reported, only exceeded by a catch of 103 sauger in this same net series in the fall of 2006. Sauger netted in the fall averaged just over 16 inches with many 18-inch fish present. Most looked more like a walleye than sauger because of their great condition.

Channel catfish catch-rates remained good for both ends of the lake in 2007, with at least two strong year classes of younger fish present. One group ranged from 9 to 11 inches, and a second group ranged from 16 to 20 inches long. No really big catfish were netted in 2007. Ling also seemed to be doing quite well in Bighorn Lake in 2007, with the biggest fish captured measuring 24.3 inches and weighing 3.45 lb.

The long-term stocking request for Bighorn Lake has been 4 million walleye fry and 200,000 walleye fingerlings. The fingerling request was increased to 500,000 per year in 2006. The full request was stocked into the lake in 2007.

Cooney Reservoir

For a long time, the mixed walleye/trout fishery in Cooney Reservoir, unlike many other reservoirs in the state, was functioning very well. Rainbow trout survival and growth rates were good, sucker numbers were under control, and there was a good fishery for walleyes. (At one time the state record walleye came from Cooney.) In 2002, the number of rainbow trout gillnetted in the fall declined dramatically, and this trend continued through 2005, when 200,000 rainbows were stocked and only two rainbows were captured in gillnets the following fall. This decline led to a change in management for rainbow trout; instead of 200,000 5-inch rainbows, 25,000 8-inch rainbows were stocked. This strategy appears to have worked to increase survival; fall gillnetting yielded 28 rainbow trout. As a result of this apparent success, the number of larger stocked rainbow was increased to 40,000 in 2007, with similar numbers of fish returning to the nets in the fall (37 caught). The fish stocked in 2006 averaged 16.1 inches and 1.81 lb, and the fish stocked in 2007 averaged 12.6 inches and 0.97 lb. Recent tagging information suggests that growth rates for larger walleyes are very low and often negative, while fish smaller than 24 inches appear to still be growing well. This data is of concern because it implies that the forage for older fish (primarily suckers) is low. Sucker abundance in the reservoir is still high; however, most of these suckers are too large (i.e., greater than 12 inches) to be prey for most walleyes. We also fear that the sucker population may be becoming so old that its reproductive capacity is diminishing. Reduced walleye forage, and our desire to determine whether walleyes are naturally reproducing in the reservoir, prompted our discontinuing walleye stocking in 2006. It has become apparent over the past 2 years that walleyes are naturally reproducing in the reservoir. Despite not stocking in the fall of 2006, we captured more YOY walleyes than ever before. Because YOY walleyes were also captured in 2007, they will not be stocked in 2008. Future stocking will be evaluated.

Another new development at Cooney Reservoir has been the illegal introduction of yellow perch. We first documented perch in the reservoir in 2005, but have not caught another fish since. We received sporadic reports of anglers catching perch, but during 2007, we received a substantial number. Fall 2007 gill nets did not yield any perch; however, stomach samples collected from walleyes in 2007 nets had juvenile perch in them. It is unclear what will happen with the perch fishery. Habitat, particularly spawning habitat, will likely limit the population. Perch will provide additional forage for walleyes and predation from walleye will also likely limit their population growth. One concern about the introduction of perch is that they, like the rainbow trout, are highly planktivorous and may compete for food. The impact of the illegal introduction is yet to be determined.

Deadmans Basin Reservoir

Water levels in Deadmans Basin started the year the highest they had been since 2000 thanks to summer releases last year to draw down Martinsdale Reservoir. The lake began almost 48% full and filled to over 61% before irrigation season started. Currently, work is continuing on the supply canal above Deadmans, so the water users were not able to start refilling the reservoir as soon as irrigation ended. The reservoir was only about 22% full at the end of November 2007.

Tiger muskies were the BIG story in Deadmans Basin this year. Many anglers made the trip to try their luck at hooking one of these large predators, but few of them actually connected. It takes lots of time and dedication to hook onto one of these large trophies, and even more luck to get them to the boat. Anglers caught a few nice tigers, but the big one needed to break the state record was not reported if it was caught. Netting results confirmed that the new record is swimming in Deadmans. A 42.8-inch fish caught during spring netting weighed in at 21.2 lb, well below the record of 28.87 lb caught in 2006. However, 2 fish caught in the fall nets would have broken this record! One was 45.0 inches and the other 48.5 inches. Both tiger muskies bottomed out our largest scale at 30 lb, and both were probably around 32 lb. Both were in good condition and looked like real eating machines. About 550 4-inch tiger muskies were planted in Deadmans in 2006 to establish another year class of fish in the lake. None of these smaller fish were captured in nets in 2007, but based on past growth rates, they were probably 17 to 20 inches by this past fall.



Anglers continued to have good success for both rainbow trout and kokanee salmon in Deadmans in 2007. Stocking tiger muskies into Deadmans to control suckers has definitely increased the average size and condition of both rainbows and kokanee. Eight standard gill nets set in Deadmans in the spring captured 168 rainbows and 12 kokanee. These rainbows averaged 12.1 inches and ranged from 10 to 17.8 inches long. The spring kokanee averaged 10.7 inches. Standardized netting in the fall captured 90 rainbows and 260 kokanee. The average size of the rainbows decreased



to 11.7 inches because recently stocked rainbow trout were included in this catch. Many of the kokanee netted were mature fish and the average size of kokanee jumped to 13.3 inches. Deadmans received plants of 200,104 rainbows and 100,786 kokanee in 2007.

Only 5 brown trout were netted in Deadmans Basin this year and, although they were nice fish, there were no real trophies caught. The two largest brown trout captured weighed about 6.5 lb each.

Lake Elmo/Lake Josephine

Lake Elmo continued to be a popular urban fishery with many anglers fishing for the stocked rainbow trout. Fishing was generally good for anyone willing to put in a little time. As an added bonus, anglers also caught some channel catfish, perch, and crappie. Most of the perch and crappie were small, but Lake Elmo can occasionally produce some nice crappie. One captured in a gill net set in Lake Elmo in the spring was 13.5 inches long and weighed 1.38 lb. The normal stocking request for Lake Elmo is 9,600 rainbows split between spring and fall plants. This year, Lake Elmo received 10,400 rainbows plus an added bonus of 198 large YCT brood fish from the Yellowstone River Trout Hatchery in Big Timber. These cutthroat trout ranged from about 15 to 20 inches and provided some real excitement for a few anglers expecting to catch 9 inch rainbows.

Tiger muskies were first stocked into Lake Elmo and Lake Josephine in September 2006 in hopes they would help control some of the suckers and stunted panfish in both lakes and provide another opportunity for anglers. These tiger muskies were about 6 inches long when planted, and were stocked at about one fish per acre (65 in Lake Elmo, and 20 in Lake Josephine). None of these tiger muskies were reported caught by anglers this summer, but 6 of them were captured in gill nets set in Lake Elmo this fall. These netted tiger muskies ranged from 17.8 to 23.5 inches with an average size of 22.3 inches. They were growing very well and should be putting fear into suckers and small panfish in both lakes. Miles City Fish Hatchery over-wintered some tiger muskies from the 2006. Of the 17 12-inch fish left, 9 were stocked into Lake Elmo and 8 into Lake Josephine. The only sampling conducted in Lake Josephine this summer was part of a Bioblitz, an event where about 90 scientists and volunteers raced against the clock to find as many animal and plant species as possible in a 24-hour period. A total of 25 different fish species were collected by netting and electrofishing in Lake Josephine and the nearby Yellowstone River. This catch included two trophy-sized largemouth bass from Lake Josephine weighing 4.86 and 5.05 lb. A total of 434 species, including fish, mammals, plants, birds and insects were inventoried in the 24-hour period.

Broadview Pond

After being dry for a number of years due to drought, Broadview Pond nearly refilled in 2006. As the pond was filling, 4,000 1.6-inch largemouth bass were stocked in July.

Broadview Pond continued to fill and actually started to spill water by early this spring, so another 4,000 bass were planted this year. Even though the 2006 bass were still small, a number of anglers stopped at Broadview Pond and had fun catching them. A couple of hours of night electrofishing on the pond this past October captured 15 largemouth bass. The bass from the 2006 plant were 10 to 11 inches long, and the 2007 fish were 8.5 to 10 inches. By next summer, these fish should be large enough to provide some exciting fishing. If Broadview Pond stays full and water temperatures are cool enough, plans are to stock catchable rainbows next summer to add to the excitement.

Absaroka-Beartooth Lakes

YCT eggs were collected for the first time in a while at Goose Lake, north of Cooke City. This was also the first year that fish originally collected in 2003 were spawned in the hatchery and stocked into the high mountain lakes of the Absaroka-Beartooth Mountains. Although we anticipate the fish will do well in the lakes, they will be monitored to determine growth and survival. Golden trout eggs were also collected from Sylvan Lake for stocking into the golden trout lakes of the Beartooths and as far away as the Big Hole Drainage. Many of the collected eggs also went to Wyoming to found populations there that will be used for a brood source. Montana is one of only a handful of states to harbor unhybridized golden trout. Although native to California, the golden trout has been stocked across the west. Because it is a close relative to the rainbow and cutthroat trout, these species can hybridize. The seclusion offered in many of the high mountain lakes of the Beartooths, however, allows the fish to persist without the risk of hybridization from other trout. In the Beartooth Mountains alone, there are over 22 lakes with golden trout populations.

FWP's high-mountain-lake fisheries crew sampled approximately 28 lakes over the summer from the Clarks Fork, Boulder, Stillwater, and West Rosebud drainages. The primary objective of the lake surveys is to monitor the fisheries in both self-sustaining and stocked lakes to determine fish health and decide whether stocking rates should be modified. Interns form half of the four-person crew that surveys the lakes from July to the end of August, providing a great opportunity for college students interested in the fisheries field to gain valuable experience.